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Chan, Christina

Sent: To:

Wednesday, February 01, 2006 10:41 AM Sullivan, Daniel; STIC-Biotech/ChemLib

Subject:

RE: Rush sequence search 09/886942

Please rush!

Thanks Chris

Chris Chan

TC 1600 New Hire Training Coordinator and SPE 1644 (571)-272-0841 Remsen, 3E89

----Original Message-----

From:

Sullivan, Daniel

Sent:

Wednesday, February 01, 2006 7:13 AM

To:

Chan, Christina

Subject:

Rush sequence search 09/886942

Hi Chris,

Please approve the following search for an after final amended case. Thanks.

Please search for the following in the pending, issued patent and commercial databases:

A nucleic acid comprising SEQ ID NO: 8;

a nucleic acid comprising the sequence from position 1 to position 909 of SEQ ID NO: 8;

a nucleic acid comprising the sequence from position 1 to position 932 of SEQ ID NO: 21.

Thank you.

Daniel M. Sullivan

Examiner AU 1636 Remsen Bldg. Room 2A74

Tel: (571) 272-0779

Mailbox: 2C70

| Searcher:          | in             |
|--------------------|----------------|
| Searcher Phone:    | 122504         |
| Date Searcher Pick | red up: 212/00 |
| Date completed:    | 9 (6 100       |
| Searcher Prep Tim  | e:             |
| Online Time:       | 16             |

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| Тур         | e of Search |
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| S/L:        | Oligomer:   |
| Encode/Tra  | ansl:       |
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| STN:                              |
| DIALOG:                           |
| QUESTEL/ORBIT:                    |
| LEXIS/NEXIS:                      |
| SEQUENCE SYSTEM:                  |
| WWW/Internet:                     |
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Post-processing: Minimum Match 0%
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seq length: 2000000000
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1 US-11-296-119-3

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1 US-11-296-119-10

1 US-11-296-119-10

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1 US-10-947-881A-4

US-10-947-881A-5

US-10-947-881A-13

US-10-334-235A-17
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US-11-297-317-15
US-11-297-317-16
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Sequence 60, Appl
Sequence 15, Appl
Sequence 16, Appl
Sequence 17, Appl
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Sequence 6, Appli
Sequence 5, Appli
Sequence 2, Appli
Sequence 10, Appli
Sequence 10, Appli
Sequence 7, Appli
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| 660.6                                  | 660.6           | 660.6             | 660.6             | 664               | 674.4             | 678.6             | 678.6             | 690.4             | 712.8             | 728.8             | 732.2             | 734               | 734               | 755               | 779               | 779               | 779               | 779             | 786.4             | 786.4             | 786.4             | 786.4             |
| 72.7<br>72.7                           | 72.7            | 72.7              | 72.7              | 73.0              | 74.2              | 74.7              | 74.7              | 76.0              | 78.4              | 80.2              | 80.6              | 80.7              | 80.7              | 83.1              | 85.7              | 85.7              | 85.7              | 85.7            | 86.5              | 86.5              | 86.5              | 86.5              |
| 9490<br>10086                          | 9490            | 9380              | 9380              | 9545              | 684               | 2947              | 2947              | 7006              | 750               | 8908              | 7354              | 6630              | 4006              | 9918              | 3894              | 3894              | 3893              | 3893            | 9511              | 9511              | 9100              | 9100              |
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| Sequence 7, Appli<br>Sequence 8, Appli | 7,              | Sequence 5, Appli | Sequence 5, Appli | Sequence 4, Appli | Sequence 69, Appl | Sequence 38, Appl | Sequence 2, Appli | Sequence 1, Appli | Sequence 3, Appli | Sequence 12, Appl | Sequence 1, Appli | Sequence 51, Appl | Sequence 11, Appl | Sequence 5, Appli | Sequence 37, Appl | Sequence 1, Appli | Sequence 39, Appl | ω<br>,          |                   | 34<br>•           | Sequence 16, Appl | Sequence 16, Appl |

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Sequence 60, Application PC/TUS0542058

GENERAL INFORMATION:
APPLICANT: University of Rochester
APPLICANT: University of Rochester
APPLICANT: University of Rochester
APPLICANT: O'Banion, M. Kerry
ITILE OF INVENTION: INFLAMMATION MODELS IN NEURODEGENERATIVE
TITLE OF INVENTION: AND ARTHRITIC DISORDERS
FILE REFERENCE: 21108.0046P1
CURRENT APPLICATION NUMBER: PCT/US05/42058
CURRENT FILING DATE: 2005-11-30
PRIOR APPLICATION NUMBER: 60/646,097
PRIOR APPLICATION NUMBER: 60/647,604
PRIOR FILING DATE: 2004-11-12
NUMBER OF SEQ ID NOS: 76
SOFTWARE: FastSEQ for Windows Version 4.0
IENGTH: 1848
TYPE: DNA
CREAKING ARTHRITICATION APPLICATION SET OF THE SET
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Best Local Similarity 98.8%;
Matches 898; Conservative
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ATTGGCCCATGTCCAATATGACCGCCATGTTGACATTGATTATTGACTAGTTATTAATAG
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Pred. No. 1.8e-260;
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Total number of hits satisfying chosen parameters:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

| 23                | 22                | 21                | 20                | 19               | 18                | 17                | 16                | 15                | 14                | 13                | 12                | 11                | 10                | 9                 | 8                 | c 7               | о<br>6            | ი<br>5            | 4                 | w                 | 2                 | μ                 | No.         | Result |
|-------------------|-------------------|-------------------|-------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------|--------|
| 891.4             | 891.4             | 891.4             | 891.4             | 891.4            | 891.4             | 891.4             | 891.4             | 891.4             | 891.4             | 891.4             | 893               | 893               | 893               | 897.8             | 897.8             | 899.4             | 899.4             | 899.4             | 899.4             | 909               | 909               | 909               | Score       |        |
| 98.1              | 98.1              | 98.1              | 98.1              | 98.1             | 98.1              | 98.1              | 98.1              | 98.1              | 98.1              | 98.1              | 98.2              | 98.2              | 98.2              |                   | 98.8              | 98.9              | 98.9              | 98.9              | 98.9              | 100.0             | 100.0             | 100.0             |             | Query  |
| 7864              | 7073              | 7073              | 6845              | 6845             | 6845              | 1848              | 1848              | 1848              | 1848              | 1848              | 1767              | 1767              | 1767              | 6485              | 6408              | 233076            | 233076            | 218802            | 1767              | 4790              | 3879              | 1767              | Length      |        |
| 14                | 49                | 14                | 63                | 62               | 43                | 64                | 61                | w                 | ۲                 | ۲                 | 34                | 34                | 34                | 39                | 39                | 61                | 61                | 62                | 34                | 51                | 51                | 34                | В           |        |
| US-08-480-120-20  | US-10-313-392-15  | US-08-480-120-15  | US-10-912-460-6   | US-10-838-906-26 | US-10-239-804-6   | US-10-978-927-32  | US-10-781-142-32  | PCT-US05-04885-32 | PCT-US03-13672-32 | PCT-US02-29640-51 | US-09-886-942-16  | US-09-886-942-15  | US-09-886-942-5   | US-09-996-128A-2  | US-09-996-128A-1  | US-10-757-349-1   | US-10-756-114-1   | US-10-897-508-1   | US-09-886-942-21  | US-10-446-629-3   | US-10-446-629-2   | US-09-886-942-8   | ID          |        |
| Sequence 20, Appl | Sequence 15, Appl | Sequence 15, Appl | Sequence 6, Appli | 26               | Sequence 6, Appli | Sequence 32, Appl | Sequence 32, Appl | Sequence 32, Appl | Sequence 32, Appl | Sequence 51, Appl | Sequence 16, Appl | Sequence 15, Appl | Sequence 5, Appli | Sequence 2, Appli | Sequence 1, Appli | Sequence 1, Appli | Sequence 1, Appli | Sequence 1, Appli | Sequence 21, Appl | Sequence 3, Appli | Sequence 2, Appli | Sequence 8, Appli | Description |        |

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Database :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pending Patents NA Main:*

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2 6/ptodata/1/pna/US102A COMB.seq:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIE

| C 21<br>22<br>23   | 00                                       |  |  | 0 0 0   | Result<br>No.         |
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| 1 1695.2<br>2 1695.2<br>3 1693.6   |  |  | 8 1737.8<br>9 1737.8<br>9 1728.6<br>1 1728.6 | 1 1767<br>2 1767<br>2 1767<br>3 1767<br>4 1741.4<br>5 1741.4<br>6 1741.4<br>7 1741.4  | t score               |
| 95.9   |  | 7 6 4 0.                                     |  | 100.0<br>100.0<br>100.0<br>98.6<br>98.6   | }                     |
| 13254<br>13535<br>7073   | 235671<br>235671<br>1766<br>8251         | 1767<br>1767<br>1767<br>1765                 | 6408<br>6485<br>1767                         | 1767<br>3879<br>4790<br>4790<br>1767<br>218802<br>233076  | Query<br>Match Length |
| 52<br>14   | 5241                                     | υυυυ<br>4444                                 | ω ω ω<br>9 4 4                               | 61<br>61<br>61<br>61  | BB                    |
| US-10-016-986-170<br>US-10-521-768-4<br>US-08-480-120-15                         | -10-756<br>-10-757<br>-09-886<br>-10-521 | -09-886-942-<br>-09-886-942-<br>-09-886-942- | 1 1 1 1                                      | US-09-886-942-8<br>US-10-446-629-2<br>US-10-446-629-3<br>US-09-886-942-21<br>US-10-897-508-1<br>US-10-756-114-1<br>US-10-757-349-1              | ID                    |
| Sequence 170, App<br>Sequence 170, App<br>Sequence 4, Appli<br>Sequence 15, Appl | 2, 6, 2,<br>2, App                       | 14   | 15, 2, 1,                                    | Sequence 8, Appli<br>Sequence 2, Appli<br>Sequence 3, Appli<br>Sequence 1, Appli<br>Sequence 1, Appli<br>Sequence 1, Appli<br>Sequence 1, Appli | Description           |

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                                                      1 US-11-009-063-5

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US-11-297-317-15

US-11-297-317-16

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1 US-11-297-317-17

US-11-296-119-6

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1 US-11-296-119-3

1 US-11-296-119-10
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Sequence 3, Appli
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| 4 4<br>5 4                             | 43                | C 42              | 41                | 40                | c 39             | 38                | 37                | 36                | 35                | 34                | 33                | 32                | 31                | 30                | 29                | 28                | 27                | 26                | 25                | 24                | 23                | 22                |
| 660.6<br>660.6                         | 664               | 666               | 666               | 674.4             | 678.6            | 678.6             | 712.8             | 728.8             | 732.2             | 734               | 734               | 748.6             | 786.4             | 786.4             | 786.4             | 786.4             | 786.4             | 786.4             | 787               | 787               | 787               | 787               |
| 37.4                                   | 37.6              | 37.7              | 37.7              | 38.2              | 38.4             | 38.4              | 40.3              | 41.2              | 41.4              | 41.5              | 41.5              | 42.4              | 44.5              | 44.5              | 44.5              | 44.5              | 44.5              | 44.5              | 44.5              | 44.5              | 44.5              | 44.5              |
| 9380<br>9380                           | 9545              | 6783              | 6783              | 684               | 2947             | 2947              | 750               | 8908              | 7354              | 6630              | 4006              | 7006              | 9511              | 9511              | 9100              | 9100              | 8255              | 8255              | 4210              | 4210              | 4207              | 4207              |
| 7 6                                    | 11                | 11                | 11                | <b>}-4</b>        | 11               | 11                | თ                 | 11                | φ                 | 9                 | 11                | 11                | 7                 | σ                 | 7                 | σ                 | 7                 | δ                 | 7                 | σ                 | 7                 | σ                 |
| US-10-554-181-5<br>US-10-554-181-5     | US-11-009-063-4   | US-11-274-344-16  | US-11-274-344-14  | PCT-US05-42058-69 | US-11-009-063-38 | US-11-009-063-2   | US-09-965-697A-3  | US-11-204-755-12  | US-11-327-232-1   | US-11-238-171-51  | US-11-274-814-11  | US-11-295-006-1   | US-10-947-881A-34 | US-10-947-881A-34 | US-10-334-235A-16 | US-10-334-235A-16 | US-10-334-235A-17 | US-10-334-235A-17 | US-10-947-881A-5  | US-10-947-881A-5  | US-10-947-881A-4  | US-10-947-881A-4  |
| Sequence 5, Appli<br>Sequence 5, Appli | Sequence 4, Appli | Sequence 16, Appl | Sequence 14, Appl | Sequence 69, Appl |                  | Sequence 2, Appli | Sequence 3, Appli | Sequence 12, Appl | Sequence 1, Appli | Sequence 51, Appl | Sequence 11, Appl | Sequence 1, Appli | Sequence 34, Appl | Sequence 34, Appl | Sequence 16, Appl | -                 | Sequence 17, Appl | Sequence 17, Appl | Sequence 5, Appli | Sequence 5, Appli | Sequence 4, Appli | Sequence 4, Appli |

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SEQUENCE 3, Application US/11009063

GENERAL INFORMATION:

APPLICANT: ROBINSON, Harriet L.

APPLICANT: ROBEN, Ted M.

APPLICANT: Bright, Rick A.

APPLICANT: Bright, Rick A.

FILE REFERENCE: 12804-005003

CURRENT APPLICATION NUMBER: US/11/009,063

CURRENT ETLING DATE: 2004-12-09

PRIOR APPLICATION NUMBER: US 60/186,364

PRIOR APPLICATION NUMBER: US 60/251,083

PRIOR FILING DATE: 2000-12-01

PRIOR FILING DATE: 2001-03-02

NUMBER OF SEQ ID NOS: 46

SOFTWARE: FastSEQ for Windows Version 4.0
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                                                                                                                                                                                                                                                                                             ; FEATURE:
, NAME/KEY: promoter.
; LOCATION: (1)...(690)
; OTHER INFORMATION: cytomegalovirus intermediate early promoter US-11-009-063-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 3
LENGTH: 3893
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                          Query Match 91.6
Best Local Similarity 99.1
Matches 1628; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
OTHER INFORMATION: vaccine vector pGA3
                            183 TGGCCCATGTCCAATATGACCGCCATGTTGACATTGATTATTGACTAGTTATTAATAGTA 242
                                                                                                                         123 CAATATTGGCTATTGGCCATTGCATACGTTGTATCCGTATCATAATATGTACATTTATAT 182
  54
                                                                                                                                                                                                                 91.6%;
99.1%;
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Result
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1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*

2: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*

3: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*

4: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*

5: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*

6: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*

7: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*

10: /cgn2_6/ptodata/1/pubpna/US11_PUBCOMB.seq:*
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1767
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US-10-446-629-3

US-10-886-942-21

US-09-886-942-15

US-09-886-942-15

US-09-886-942-14

US-09-886-942-14

US-09-886-942-14

US-09-886-942-15

US-09-886-942-14

US-09-886-942-15

US-09-886-942-15

US-09-886-942-15

US-09-886-942-15

US-09-886-942-15

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US-09-886-942-17

US-09-886-942-17
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| 1603.6<br>1603.6<br>1603.6                               | 1606.2<br>1606.2<br>1606.2   | 1611.4<br>1606.2<br>1606.2<br>1606.2   | 1614.4<br>1614.4<br>1613.2                               | 1617.4<br>1617.4<br>1617.4                                | 1620.6<br>1620.4<br>1620.4<br>1619<br>1619   |
| 90.8<br>90.8   | 90.9<br>90.9<br>90.9   | 91.2<br>90.9<br>90.9   | 91.4<br>91.4<br>91.3                                     | 91.5<br>91.5  | 91.7<br>91.7<br>91.7<br>91.6<br>91.6   |
| 5108<br>5111   | 4909<br>4945<br>4945<br>4945   | 1715<br>4867<br>4867<br>4867   | 3894<br>3894<br>3894                                     | 7807<br>7913  | 13464<br>6845<br>6845<br>3893<br>3893  |
| 777  | 8<br>7<br>10   | 10<br>10   | 773  | 77  | 173857   |
| US-10-796-486-51<br>US-10-796-486-52<br>US-10-796-486-55 | US-10-492-178-7<br>US-10-149-640-9<br>US-10-168-217A-9<br>US-11-081-244-9    | US-09-886-942-7<br>US-10-149-640-16<br>US-10-168-217A-16<br>US-11-081-244-16     | US-09-798-675-1<br>US-10-093-953A-1<br>US-10-093-953A-37 | US-10-093-953A-39<br>US-10-394-388A-7<br>US-10-394-388A-8 | US-10-394-388A-9 US-10-239-804-6 US-10-818-906-26 US-09-798-675-3 US-10-093-953A-3                     |
| Sequence 51,<br>Sequence 52,<br>Sequence 55,             | Sequence 7, Appl<br>Sequence 9, Appl<br>Sequence 9, Appl<br>Sequence 9, Appl | Sequence 7, Appli<br>Sequence 16, Appl<br>Sequence 16, Appl<br>Sequence 16, Appl | Sequence 1, F<br>Sequence 1, F<br>Sequence 37,           | Sequence 39,<br>Sequence 7, 1<br>Sequence 8, 1            | Sequence 9, Appli<br>Sequence 6, Appli<br>Sequence 26, Appli<br>Sequence 3, Appli<br>Sequence 3, Appli |
| App1<br>App1<br>App1                                     | Appli<br>Appli<br>Appli<br>Appli<br>Appli                                    | Appli<br>Appli<br>Appl<br>Appl   | Appli<br>Appli<br>Appli                                  | App<br>App1<br>App1                                       | Appli<br>Appli<br>Appli<br>Appli<br>Appli  |

US-09-886-942-8
; Sequence 8, Application US/09886942
; Patent No. US20020081708A1
; GENERAL INFORMATION:

PUNNONEN, JUHA

RESULT 1

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; TYPE: DNA; ORGANISM: Artificial Sequence; ORGANISM: Artificial Sequence; PEATURE; OTHER INFORMATION: Description of Artificial Sequence: Synthetic; OTHER INFORMATION; oligonucleotide
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APPLICANT:
TITLE OF INVENTION: NOVEL CHIMERIC PROMOTERS
FILE REFERENCE: 02-031910US
CURRENT APPLICATION NUMBER: US/09/886,942
CURRENT FILING DATE: 2001-06-21
PRIOR APPLICATION NUMBER: 60/213,829
PRIOR FILING DATE: 2000-06-23
NUMBER OF SEQ ID NOS: 40
NUMBER OF SEQ ID NOS: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Patentin Ver. SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
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WRIGHT, ANNE
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                     ATTGGCCCATGTCCAATATGACCGCCATGTTGACATTGATTATTGACTAGTTATTAATAG 240
                                                                                             ATCAATATTGGCTATTGGCCATTGCATACGTTGTATCCGTATCATAATATGTACATTTAT 180
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ATTGGCCCATGTCCAATATGACCGCCATGTTGACATTGATTATTGACTAGTTATTAATAG
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Abx10643 Vector, h
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Aal38397 Chimeric
Aal38386 Chimeric
Aal38390 Chimeric
Aal38393 Chimeric
Aal38393 Chimeric
Aal38393 Chimeric
Aal38373 Chimeric
Aal38378 Nucleotid
Aaat39345 Nucleotid
Aaat40915 Nucleotid
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Ads20070 pMV10.1-C
Aal38393 Consensus
Adw98820 Human her
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| 1611.4            | 1616.4             | 1617.4             | 1617.4             | 1617.4             | 1620.4             | 1620.6             | 1620.6            | 1621.4   | 1660.6            | 1665              | 1669.8   | 1681.6   | 1688.8             | 1691.2             | 1692               | 1692.8             | 1692.8             | 1692.8   | 1693.6   | 1694.8   | 1695.2             | 1695.2             | 1695.2            | 1695.2   | 1695.2             |
| 91.2              | 91.5               | 91.5               | 91.5               | 91.5               | 91.7               | 91.7               | 91.7              | 91.8     | 94.0              | 94.2              | 94.5     | 95.2     | 95.6               | 95.7               | 95.8               | 95.8               | 95.8               | 95.8     | 95.8     | 95.9     | 95.9               | 95.9               | 95.9              | 95.9     | 95.9               |
| 1715              | 3894               | 7913               | 7807               | 4282               | 6845               | 13464              | 4326              | 8911     | 1758              | 1757              | 1757     | 1767     | 13254              | 1765               | 7864               | 2361               | 2361               | 2170     | 7073     | 2133     | 229354             | 13535              | 13254             | 13254    | 13254              |
| თ                 | σ                  | 12                 | 12                 | 4                  | σ                  | 12                 | 4                 | 12       | თ                 | 9                 | σ        | 6        | w                  | σ                  | N                  | 14                 | œ                  | 6        | N        | Н        | σ                  | 12                 | w                 | w        | w                  |
| AAL38379          | AAS19256           | ADK15559           | ADK15558           | AAF83668           | ABK37491           | ADK15560           | AAD04044          | ADN07735 | AAL38374          | AAL38383          | AAL38389 | AAL38391 | AAA31025           | AAL38392           | AAT50963           | ADW07232           | ADA50595           | AAD38152 | AATS0962 | AAN91042 | ABQ74179           | ADJ57067           | AAA31039          | AAA32165 | AAA32151           |
| Aal38379 Chimeric | Aas19256 DNA vacci | Adk15559 Andes han | Adk15558 Hantaan h | Aaf83668 pCMV-II n | Abk37491 Vesicular | Adk15560 Hantaan/A | Aad04044 pWRG7077 | ຫ        | Aal38374 Chimeric | Aal38383 Chimeric |          |          | Aaa31025 pEe12 Com | Aal38392 Wild-type | Aat50963 TF8-5G9 C | Adw07232 DNA seque | Ada50595 HCMV imme |          |          |          | Abq74179 Human cyt | Adj57067 Vector pl | Aaa31039 Complete |          | Aaa32151 pEe12 Com |

RESULT 1
AAL38380
ID AAL3
XX AAL3
AC AAL3
AC Chim
XX Inmu
KW Gene
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CC Comm
CC TOTO 03-JAN-2002. 23-JUN-2000; 2000US-0213829P. 21-JUN-2001; 2001WO-US020123. WO200200897-A2 gene therapy; Chimeric sequence 6A8 from 29-AUG-2003 15-AUG-2002 Chimeric. Homo sapiens. AAL38380; AAL38380 standard; DNA; 1767 BP Immunomodulator; cytostatic; antibacterial; immunogenic; vaccination;
gene therapy; autoimmune disorder; tumour; chimeric; human; CMV promoter; (revised) (first entry) CMV promoters of human AD169/Towne strains

(MAXY-) MAXYGEN INC.

Punnonen J, Wright A, Semyonov

WPI; 2002-188381/24.

New isolated or recombinant promoter/enhancers, useful in producing a prophylactic or therapeutic effect in humans, especially useful in gertherapy for treating or preventing infectious diseases, autoimmune disorders or tumors. gene

Claim 1; Fig 8; 110pp; English.

The invention relates to isolated or recombinant nucleic acids, which comprise any of 18 sequences fully defined in the specification. The nucleic acids are designated 1082, 1182, 12C9, 12E1, 12H9, 3C9, 4B5, 6A8,

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AX402409

3 AY446869

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AX402409 Sequence
AY446869 Human Her
AY315187 Human her
AX402393 Sequence
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| . 1625   | 1625     | 1636     | 1638.4   | 1662.2   | 1665               | 1665              | 1666.2             | 1669.8   | 1671.2             | 1672.6   | 1677.6             | 1679.2             | 1681.6            | •       | 1692.8            | •                 | 1695.2             | 1695.2             | 1695.2   | •                 | 1695.2     | •        | ٠      | 1695.2   | · m               | 9                 |
| 92.0     | 92.0     | 92.6     | 92.7     | 94.1     | 94.2               | 94.2              | 94.3               | 94.5     | 94.6               | 94.7     | 94.9               | 95.0               | 95.2              | 95.8    | 95.8              | 95.8              | 95.9               | 95.9               | 95.9     | 95.9              | 95.9       | 95.9     | •      | 95.9     | 95.9              |                   |
| 229700   | 25489    | 25770    | 235645   | 1758     | 25616              | 1757              | 25591              | 1757     | 234881             | 24589    | 7995               | 25572              | 1767              | 2361    | 2170              | 2170              | 233739             | 229354             | 229354   |                   | 229354     | 13254    | 13254  | 13254    | 13254             | 11795             |
| 13       | 13       | 3        | 13       | σ        | 13                 | σ                 | 13                 | 0        | 13                 | 13       | 11                 | 13                 | Ø                 | 13      | σ                 | σ,                | 13                 | 13                 | σ        | σ                 | o          | σ        | σ      | 0        | თ                 | თ                 |
| AC146904 | AY446867 | AY446868 | AY446894 | AX402390 | AY446864           | AX402399          | AY446865           | AX402405 | AC146906           | AY446870 | CVU64448           | AY446866           | AX402407          | HS5MIEP | AX451705          | AR656224          | AC146999           | HEHCMVCG           | AX686187 | AR475529          | AR474465   | I58610   | 158596 | AR038321 | AR038307          | AX027785          |
| Himan    | Human    | Human    |          | ທ        | AY446864 Human her | AX402399 Sequence | AY446865 Human her | equen    | AC146906 Human Her |          | U64448 Cloning vec | AY446866 Human her | AX402407 Sequence |         | AX451705 Sequence | AR656224 Sequence | AC146999 Human Her | X17403 Human cytom |          | AR475529 Sequence | 65 Sequenc | Sequence | a      |          | AR038307 Sequence | AX027785 Sequence |

| Qу 181   | ор<br>1:   | B 8  | g 9   | Query Match<br>Best Local<br>Matches 176   | ORIGIN | source | FEATURES            | JOURNAL  | TITLE                    | AUTHORS                                   | REFERENCE                              | ORGANISM            | SOURCE              | ACCESSION<br>VERSION | LOCUS                                       | RESULT 1<br>AX402396 |
|--|--|--|---|--|--------|--------|---------------------|--|--------------------------|---|--|---------------------|---------------------|----------------------|---|----------------------|
| ATTGGCCCATGTCCAATATGACCGCCATGTTGACATTGATTATTGACTAGTTATTAATAG | 121 ATCAATATTGGCTATTGGCCATTGCATACGTTGTATCCGTATCATAATATGTACATTTAT 1 | 61 ATCTATACATTGAATCATATTGGCAATTAGCCATATTATTCATTGGTTATATAGCATAA 1 | 1 ATATGAGGCTATATCGCCGATAGAGGCGACATCAAGCCGGCACATGGCCAATGCATATCG 60 | Query Match 100.0%; Score 1767; DB 6; Length 1767;<br>Best Local Similarity 100.0%; Pred. No. 0;<br>Matches 1767; Conservative 0; Mismatches 0; Indels 0; Gaps |        |        | Location/Qualifiers | Patent: WO 0200897-A 8 03-JAN-2002; Maxygen, Inc. (US) | Novel chimeric promoters | Punnonen, J., Wright, A. and Semyonov, A. | other sequences; artificial sequences. | synthetic construct | synthetic construct | i i                  | AX402396 1767 bp DNA linear PAT 07-JUN-2002 |                      |
| 240  | 180  | 120<br>120   | ő ő   | 0;   |        |        |                     |  |                          |   |  |                     |                     |                      | 2002  |                      |

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1: /cgn2 6/ptodata/2/pubpna/US06_NEW_PUB.seq:*

2: /cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*

3: /cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*

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6: /cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*

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8: /cgn2_6/ptodata/2/pubpna/US11_NEW_PUB.seq1:*

9: /cgn2_6/ptodata/2/pubpna/US11_NEW_PUB.seq3:*

10: /cgn2_6/ptodata/2/pubpna/US11_NEW_PUB.seq3:*

11: /cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq3:*
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US-11-179-798-2
US-11-179-798-3
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US-11-179-798-4
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RESULT 1 US-10-521-768-2

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; FEATURE:
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SEQ ID NO 2
LENGTH: 8251
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Publication No. US20060003405A1
GENERAL INFORMATION:
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APPLICANT: Lonza Biologics plc.

TITLE OF INVENTION: Method of expressing recombinant protein in CHO cells FILE REFERENCE: 4145-22

CURRENT APPLICATION NUMBER: US/10/521,768

CURRENT FILING DATE: 2005-01-19

PRIOR APPLICATION NUMBER: PCT/EP2003/007946

PRIOR FILING DATE: 2003-07-21

PRIOR PILING DATE: 2002-07-19

RIOR PILING DATE: 2002-07-19

NUMBER OF SEQ ID NOS: 4
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| Sequence 2, Appli | Sequence 1, Appli | Sequence 1, Appli | Sequence 1, Appli | Sequence 8, Appli | •               | Sequence 4, Appli | Sequence 2, Appli | Sequence 1, Appli | Sequence 7, Appli | Sequence 2, Appli | Sequence 1, Appli | Sequence 1, Appli | Sequence 4, Appli | Sequence 3, Appli | Sequence 2, Appli | Sequence 1, Appli | Sequence 25, Appl | Sequence 1, Appli | Sequence 43, Appl | Sequence 1, Appli |

### RESULT 1 US-08-276-852-156 Sequence 156, Appl Patent No. 5652138 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOSTWARE: Patentin Release #1.0, Ver CURRENT APPLICATION DATA: APPLICATION UNMBER: US/08/276,852 FILING DATE: 18-JUL-194 CCLASSIFICATION UNMBER: US 08/178,302 FILING DATE: 30-SEP-193 PRIOR APPLICATION DATA: APPLICATION NUMBER: US 07/954,148 PILING DATE: 30-SEP-192 ATTONNEY/AGENT INFORMATION: NAME: Fitting, Thomas REFERENCE/DOCKET NUMBER: SCR1452P TELECOMMUNICATION INFORMATION: REFERENCE/DOCKET NUMBER: SCR1452P TELECOMMUNICATION INFORMATION: TELECOMMUNICATION INFORMATION: TELECOMMUNICATION INFORMATION: TELECOMMUNICATION INFORMATION: GENERAL INFORMATION: TELEFAX: 619-554-6312 INFORMATION FOR SEQ ID NO: TITLE OF INVENTION: HUDTLE OF INVENTION: TO NUMBER OF SEQUENCES: 1. CORRESPONDENCE ADDRESS: APPLICANT: Burton, Dennis R APPLICANT: Barbas, Carlos F APPLICANT: Lerner, Richard A SEQUENCE CHARACTERISTICS: APPLICANT: ADDRESSEE: The Scripps Research Institute, Office of ADDRESSEE: Patent Counsel STREET: 10666 No. 5652138th Torrey Pines Road, Suite 220, STREET: Mail Drop TPC8 CITY: La Jolla STATE: CA COUNTRY: USA COUNTRY: USA ZIP: 92037 LENGTH: 13254 base pairs TYPE: nucleic acid STRANDEDNESS: double Application US/08276852 HUMAN NEUTRALIZING MONOCLONAL ANTIBODIES TO HUMAN IMMUNODEFICIENCY VIRUS Release #1.0, Version 170 156: #1.25

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| ů                  | 4 7      | 3        | 42       | 41                 | 40                 | 39      | 38       | 37       | 36       | 35       | 34                 | ω<br>u             | 32                | 31       | 30       | 29       | 28       | 27       | 26                 | 25                 | 24                | 23       | 22       | 21       | 20       | 19                |
| 00/.4              | ) a      | 869      | 869      | 870.6              | 871.6              | 874.8   | 874.8    | 874.8    | 874.8    | 874.8    | 874.8              | 877                | 879.4             | 880.2    | 881.8    | 883.6    | 885      | 885.8    | 888.2              | 888.2              | 889.8             | 891.4    | 891.4    | 891.4    | 891.4    | 891.4             |
|                    | 95.6     | 95.6     | 95.6     | 95.8               | 95.9               | 96.2    | 96.2     | 96.2     | 96.2     | 96.2     | 96.2               | 96.5               |                   | 96.8     | 97.0     | 97.2     | 97.4     | 97.4     | 97.7               | 97.7               | 97.9              | 98.1     | 98.1     | 98.1     | 98.1     | 98.1              |
| 0//67              | 229700   | 25572    | 25489    | 25591              | 7995               | 2361    | 2170     | 2170     | 1665     | 912      | 912                | 24589              | 1767              |          | 23       |          | 1767     | 1765     | 22                 | 25556              | 1767              |          | 229354   | 229354   | 229354   | 229354            |
| 13                 | ü        | 13       | Ľ        | 13                 | 11                 | 13      | σ        | σ        | თ        | 0        | Φ                  | 13                 | σ                 | 13       | 13       | v        | 0        | σ        | 13                 | 13                 | თ                 | 13       | 13       | თ        | Φ        | σ                 |
| A1446868           | AC146904 | AY446866 | AY446867 | AY446865           | CVU64448           | HS5MIEP | AX451705 | AR656224 | AX402408 | AR253306 | BD131767           | AY446870           | AX402407          | AC146907 | AC146906 | AX402394 | AX402406 | AX402401 | AC146905           | AY446871           | AX402402          | AC146999 | HEHCMVCG | AX686187 | AR475529 | AR474465          |
| AY446868 Human her | Human    |          | Human    | AY446865 Human her | U64448 Cloning vec |         |          |          |          |          | BD131767 Genetic v | AY446870 Human her | AX402407 Sequence |          |          | AX402394 |          | ຜ        | AC146905 Human Her | AY446871 Human her | AX402402 Sequence |          | ₩.       |          |          | AR474465 Sequence |

RESULT 1

| S<br>S   | 밁   | §  | В   | Ş   | 망  | Ş  | 7 M O   | ORJ  |   |                                |        | FE)                                    | •                                   |                          | •   | REI       |                                       | SOS                 | G        | YE!                    | AC        | DE S                             | 5 2   |
|--|-----|--|---|---|--|--|---|--|---|--------------------------------|--------|--|-------------------------------------|--------------------------|---|-----------|---------------------------------------|---------------------|----------|------------------------|-----------|----------------------------------|-------|
| 181  | 121 | 121  | •   | •   |  |  | Query Match<br>Best Local :<br>Matches 90:  | ORIGIN                                       |   |                                | source | FEATURES                               | JOURNAL                             | TITLE                    | AUTHORS                                   | REFERENCE | 0                                     | SOURCE              | KEYWORDS | VERSION                | ACCESSION | DEFINITION                       | COLLE |
| ATTGGCCCATGTCCAATATGACCGCCATGTTGACATTGATTATTGACTAGTTATTAATAG |     | ATCAATATTGGCTATTGGCCATTGCATACGTTGTATCCGTATCATAATATGTACATTTAT | 61 ATCTATACATTGAATCAATATTGGCAATTAGCCATATTATTCATTGGTTATATAGCATAA | 61 ATCTATACATTGAATCAATATTTGGCAATTAGCCATATTATTATTCATTGGTTATATAGCATAA | 1 ATATGAGGCTATATCGCCGATAGAGGCGACATCAAGCCGGCACATGGCCAATGCATATCG | 1 ATATGAGGCTATATCGCCGATAGAGGCGACATCAAGCCGGCACATGGCCAATGCATATCG | Query Match 100.0%; Score 909; DB 6; Length 1767;<br>Best Local Similarity 100.0%; Pred. No. 1e-261;<br>Matches 909; Conservative 0; Mismatches 0; Indels 0; Gaps | <pre>/note="Synthetic oligonucleotide"</pre> | /mol_type="unassigned DNA" /db_xref="taxon:32630" | organism="synthetic construct" | 11767  | Maxygen, inc. (US) Location/Oualifiers | Patent: WO 0200897-A 8 03-JAN-2002; | Novel chimeric promoters | Punnonen, J., Wright, A. and Semyonov, A. |           | other semiences: artificial semiences | synthetic construct |          | AX402396.1 GI:21387431 |           | Semience 8 from Datent WO0200807 |       |
| 240  | 180 | 180  | 120   | 120   | 60   | 60   | 0,  |  |   |                                |        |  |                                     |                          |   |           |                                       |                     |          |                        |           | -2002                            | )     |

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10073.821 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.

# SUMMARIES

| č      | score | Match | Match Length | DB  | ID       | Description        |
|--------|-------|-------|--------------|-----|----------|--------------------|
| 1      | 909   | 100.0 | 1767         | ٥ : | AAL38380 | Aal38380 Chimeric  |
| N      | 909   | 100.0 | 3879         | 13  | ADS20069 |                    |
| w      | 909   | 100.0 | 4790         | 13  | ADS20070 | Ads20070 pMV10.1-C |
| 4      | 899.4 | 98.9  | 1767         | თ   | AAL38393 | Aal38393 Consensus |
| ი<br>5 | 899.4 | 98.9  | 218802       | 14  | ADW98820 | Adw98820 Human her |
| 6      | 897.8 | 98.8  | 6408         | œ   | ABX10643 | Abx10643 Vector, h |
| 7      | 897.8 | 98.8  | 6485         | 60  | ABX10644 |                    |
| 8      | 893   | 98.2  | 1767         | 6   | AAL38388 |                    |
| 9      | 893   | 98.2  | 1767         | σ   | AAL38377 |                    |
| 10     | 893   | 98.2  | 1767         | σ   | AAL38387 |                    |
| 11     | 891.4 | 98.1  | 1848         | 8   | ADA50596 |                    |
| 12     | 891.4 | 98.1  | 1848         | 12  | ADF53547 | Adf53547 Human CMV |
| 13     | 891.4 | 98.1  | 2133         | _   | AAN91042 | Aan91042 Promoter- |
| 14     | 891.4 | 98.1  | 6845         | σ   | ABK37491 | Abk37491 Vesicular |
| 15     | 891.4 | 98.1  | 7073         | N   | AAT50962 |                    |
| 16     | 891.4 | 98.1  | 7864         | N   | AAT50963 | Aat50963 TF8-5G9 C |
| 17     | 891.4 | 98.1  | 8251         | 12  | ADJ57065 | Adj57065 Vector pl |
| 18     | 891.4 | 98.1  | 9831         | 14  | AEB86488 | Aeb86488 LAP vecto |
| 19     | 891.4 | 98.1  | 11795        | w   | AAA59345 | Aaa59345 Nucleotid |

The invention relates to isolated or recombinant nucleic acids, which comprise any of 18 sequences fully defined in the specification. The nucleic acids are designated 1082, 1182, 12C9, 12E1, 12H9, 3C9, 4B5, 6A8,

Claim 1; Fig 8; 110pp; English.

New isolated or recombinant promoter/enhancers, useful in producing a prophylactic or therapeutic effect in humans, especially useful in gene therapy for treating or preventing infectious diseases, autoimmune disorders or tumors.

WPI; 2002-188381/24. Punnonen J, Wright A,

Semyonov

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(MAXY-) MAXYGEN INC.

|          |                    |          |          | ი                  |          | ი                  |                    |                   |                    |                    |                    |                    |                    |                   |          |                   |          |                   |          | O                  |                    | n                 | ი                 |                    |                    |
|----------|--------------------|----------|----------|--------------------|----------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|----------|-------------------|----------|-------------------|----------|--------------------|--------------------|-------------------|-------------------|--------------------|--------------------|
| 45       | 44                 | 4.3      | 42       | 41                 | 40       | 39                 | 38                 | 37                | 36                 | 35                 | 34                 | 33                 | 32                 | 31                | 30       | 29                | 28       | 27                | 26       | 25                 | 24                 | 23                | 22                | 21                 | 20                 |
| 864.4    | 864.4              | 864.4    | 867.4    | 867.4              | 867.4    | 867.4              | 867.4              | 874.8             | 874.8              | 874.8              | 874.8              | 874.8              | 879.4              | 883.6             | 885      | 885.8             | 888.2    | 888.2             | 889.8    | 891.4              | 891.4              | 891.4             | 891.4             | 891.4              | 891.4              |
| 95.      | 95.1               | 95.1     | 95.4     | 95.4               | 95.4     | 95.4               | 95.4               | 96.2              | 96.2               | 96.2               | 96.2               | 96.2               | 96.7               | 97.2              | 97.4     | 97.4              | 97.7     | 97.7              |          |                    | 98.1               | 98.1              | 98.1              | 98.1               | 98.1               |
| 8687     | 8687               | 8687     | 8149     | 8149               | 8135     | 8135               | 8083               | 2361              | 2361               | 2170               | 1765               | 912                | 1767               | 1766              | 1767     | 1765              | 13254    | 1767              | 1767     | 229354             | 13535              | 13254             | 13254             | 13254              | 13254              |
| 14       | σ                  | σ        | N        | N                  | N        | N                  | N                  | 14                | œ                  | 9                  | δ                  | N                  | 6                  | თ                 | σ        | σ                 | w        | თ                 | თ        | σ                  | 12                 | w                 | w                 | w                  | N                  |
| ADY80264 | ABV72726           | ABV72727 | AAQ90135 | AAQ90133           | AAQ90136 | AAQ90134           | AAQ90132           | ADW07232          | ADA50595           | AAD38152           | AAL38392           | AAZ09519           | AAL38391           | AAL38378          | AAL38390 | AAL38385          | AAA31025 | AAL38373          | AAL38386 | ABQ74179           | ADJ57067           | AAA31039          | AAA32165          | AAA32151           | AAT40915           |
|          |                    |          |          |                    |          |                    |                    |                   |                    |                    |                    |                    |                    | •                 |          |                   |          |                   |          |                    |                    |                   |                   |                    |                    |
| 4        | Abv72726 Expressio | Expressi |          | Aaq90133 Plasmid p |          | Aaq90134 Plasmid p | Aaq90132 Plasmid p | Adw07232 DNA sequ | Ada50595 HCMV imme | Aad38152 Human cyt | Aal38392 Wild-type | Aaz09519 Human CMV | Aal38391 Wild-type | Aal38378 Chimeric |          | Aal38385 Chimeric |          | Aal38373 Chimeric |          | Abq74179 Human cyt | Adj57067 Vector pl | Aaa31039 Complete | Aaa32165 Complete | Aaa32151 pEe12 Com | Aat40915 Nucleotid |

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RESULT 1
AALJ3380
ID AALJ
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AC AAL3
AC Chim
XX Immu
KW Gene
KW ds.
XX Homo
OS Chim
XX HOMO
XX Chim
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CC COMM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-JUN-2001; 2001WO-US020123.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-JAN-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200200897-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chimeric sequence 6A8 from CMV promoters of human AD169/Towne strains.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-AUG-2003
15-AUG-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAL38380 standard; DNA; 1767 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Immunomodulator; cytostatic; antibacterial; immunogenic; vaccination;
gene therapy; autoimmune disorder; tumour; chimeric; human; CMV promo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CMV promoter;
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| ACATTGAATCO  | 98.<br>Vative   | WESULT 1  US-10-978-927-32  Sequence 32, Application US/10  Publication No. US20060009406A  GENERAL INFORMATION:  APPLICANT: Kyrkanides, Stepha  TITLE OF INVENTION: VECTORS H  TITLE OF INVENTION: WECTORS H  TITLE OF INVENTION: BETA-HEX  FILE REFERENCE: 21108.001109.  CURRENT FILING DATE: 2004-11  PRIOR APPLICATION NUMBER: 00/  PRIOR APPLICATION NUMBER: 00/  PRIOR FILING DATE: 2002-05-02  PRIOR FILING DATE: 2002-05-02  PRIOR FILING DATE: 2002-05-02  VUMBER OF SEQ ID NOS: 41  SOFTWARE: FASTSEQ for Windows SEQ ID NO 32  LENGTH: 1848  TYPE: DNA  ORGANISM: Artificial Sequenc FEATURE: OTHER INFORMATION: Descripti  OTHER INFORMATION: Synthetic,  US-10-978-927-32  |            | 5089 5488 5500 5500 570 4775 4775 66135 6135 6135 6135 6135 6741 7127  |
| ATCAATA ATCAATA ATTGAATA ATTGGCC ATTGGCC ATTGGCC ATTGGCC CAATATG   |   | US/1097 99406A1 99406A1 ORS HAN ORS HAN ORS HAN ORS 14 11-0 105-02 11-05-02 |            |  |
| TATTGGCATTTAGCCATATTATTCATION  | ; Score 891.4; DB 6; Length; Pred. No. 1.7e-265; O; Mismatches 11; Indels CGATAGAGGCGACATCAAGCCGGCACATGGG | 978927 1 1 1 2 NOS  AVING BOTH ISOFORMS OF  OSAMINIDASE  S/10/978,927 -01 -01 /US03/13672  /US03/13672  377,503  Version 4.0  e e con of Artificial Sequence: Construct  | ALIGNMENTS | US-11-179-798-5 US-11-179-798-3 US-11-179-798-6 US-11-179-798-4 US-11-179-798-4 US-11-179-798-4 US-11-0401-386B-62 US-11-065-716-51 US-11-1855-490C-49 US-11-1855-490C-49 US-10-978-927-8 US-10-978-927-8 US-10-981-356A-44 US-11-196-046-44 US-11-159-919-17 US-10-981-356A-45 US-11-16-820-22 US-11-196-046-45 US-11-196-046-21 US-11-196-046-21 US-11-196-046-21 US-11-196-046-21 US-11-198-13-646-21 US-11-199-919-15 US-11-159-919-15   |
| TATATAGCATAA 12 TATATAGCATAA 14 TATATAGCATTAA 45 ATGTACATTTAT 18 ATGTACATTTAT 51 ATGTACATTTAT 51 ATGTACATTTAT 51 AGTTATTAATAG 24 AGTTATTAATAG 57 | ngth 1848;  dels 0; Gaps 0;  ATGGCCAATGCATATCG 60  ATGGCCAATGCATATCG 392                                  | /Noce =  |            | Sequence 5, Appli<br>Sequence 6, Appli<br>Sequence 1, Appli<br>Sequence 1, Appli<br>Sequence 1, Appli<br>Sequence 81, Appli<br>Sequence 62, Appl<br>Sequence 2, Appli<br>Sequence 2, Appli<br>Sequence 44, Appli<br>Sequence 44, Appli<br>Sequence 17, Appli<br>Sequence 17, Appli<br>Sequence 21, Appli<br>Sequence 21, Appli<br>Sequence 21, Appli<br>Sequence 21, Appli<br>Sequence 21, Appli<br>Sequence 21, Appli<br>Sequence 22, Appli<br>Sequence 21, Appli<br>Sequence 22, Appli<br>Sequence 21, Appli<br>Sequence 21, Appli<br>Sequence 21, Appli<br>Sequence 21, Appli<br>Sequence 21, Appli<br>Sequence 31, Appli |

| 10 891.4<br>11 891.4<br>12 891.4<br>13 891.4<br>13 891.4<br>14 891.4<br>16 889.8<br>17 885.8<br>19 885.8<br>19 883.6<br>20 879.4<br>21 874.8<br>23 874.8  | 8888<br>899999999999999999999999999999999   | Result<br>No. Score               | Pred. No.<br>score gre<br>and is de  | Database :   | Post-processing:  | Minimum DB seq<br>Maximum DB seq | Total number              | Searched:                | Scoring table                           | Title:<br>Perfect score:<br>Sequence:                     | Run on:  | OM nucleic - 1           |  |
|---|---|-----------------------------------|--|--|---|----------------------------------|---------------------------|--------------------------|---|---|--|--------------------------|--|
| 98.2 1767<br>98.1 1848<br>98.1 6845<br>98.1 6845<br>98.1 13254<br>98.1 13254<br>97.4 1765<br>97.4 1767<br>97.4 1767<br>97.4 1767<br>97.4 1767<br>97.2 1766<br>96.7 1767<br>96.2 2170  | 100.0 1767<br>100.0 3879<br>100.0 4790<br>98.9 1767<br>98.9 218802<br>98.9 218802<br>98.8 6485<br>98.2 1767 | query<br>Query<br>Match Length DB | No. is the number of results greater than or equal to the derived by analysis of the t | Published Application (Cgn2-6) (ptodata/12: //cgn2-6) (ptodata/13: //cgn2-6) (ptodata/14: //cgn2-6) (ptodata/15: //cgn2-6) (ptodata/16: //cgn2-6) (ptodata/17: //cgn2-6) (ptodata/19: / | Minimum Match 0%<br>Maximum Match 100<br>Listing first 45 | length: 0<br>length: 2000000000  | of hits satisfying chosen | 9793542 seqs, 4134689005 | : IDENTITY_NUC<br>Gapop 10.0 , Gapext 1 | US-09-886-942-8_COPY_1<br>: 909<br>1 atatgaggctatatcgccga | February 4, 2006, 13   | nucleic search, using sw | GenCore<br>Copyright (c) 1993              |
| 201-142-15 86-942-15 86-942-15 38-906-26 38-906-26 116-986-156 116-986-15 86-942-13 866-942-13 866-942-13 866-942-15 866-942-15 866-942-15  |   | UMMARIES                          | lts predicted by chance<br>the score of the result<br>he total score distribu          | ublished Applications NA Main:* //ggg2_6/ptodata/1/pubpna/USOB_PUBCOMB.seq:* //ggg2_6/ptodata/1/pubpna/USOB_PUBCOMB.seq:* //ggg2_6/ptodata/1/pubpna/USOB_PUBCOMB.seq:* //ggg2_6/ptodata/1/pubpna/USOB_PUBCOMB.seq:* //ggg2_6/ptodata/1/pubpna/USIOB_PUBCOMB.seq:* //ggg2_6/ptodata/1/pubpna/USIOB_PUBCOMB.seq:* //ggg2_6/ptodata/1/pubpna/USIOD_PUBCOMB.seq:* //ggg2_6/ptodata/1/pubpna/USIOD_PUBCOMB.seq:* //ggg2_6/ptodata/1/pubpna/USIOD_PUBCOMB.seq:* //ggg2_6/ptodata/1/pubpna/USIOD_PUBCOMB.seq:* //ggg2_6/ptodata/1/pubpna/USIOD_PUBCOMB.seq:*  | *<br>summaries  |                                  | n parameters: 19587084    | 005 residues             | 1.0                                     | _1_909<br>Jaaacggtgcattggaacgcgg                          | 3:11:03 ; Search time 1069.74<br>(without alignments)<br>7026.829 Million cell | model                    | version 5.1.7<br>- 2006 Biocceleration Ltd |
| Sequence 15, Appl Sequence 16, Appl Sequence 32, Appl Sequence 26, Appl Sequence 26, Appl Sequence 170, App Sequence 170, App Sequence 14, Appl Sequence 14, Appl Sequence 18, Appl Sequence 19, Appl Sequence 19, Appl Sequence 20, Appl Sequence 20, Appl Sequence 20, Appl Sequence 20, Appl | equence 8, 1 equence 3, 1 equence 1, 1 equence 1, 1 equence 1, 1 equence 2, 1 equence 5, 1                  | escription                        | to have a being printed, tion.   | AAAAAAAA******************************   |   |                                  | 7084                      |                          |   | ,<br>,<br>,<br>,<br>,<br>,                                | 59.74 Seconds<br>59)<br>cell updates/sec                                       |                          | itd.                                       |
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| ი<br>ი            |             | US-11-068-155-6  | 10 | 5041 | 89.1 | 810.2 | 45     |  |
|-------------------|-------------|------------------|----|------|------|-------|--------|--|
| equence 6, Appli  | co.         | US-10-950-050-6  | 9  | 5041 | 89.1 | 810.2 | 44     |  |
| Sequence 6, Appli |             | US-10-940-315-6  | œ  | 5041 | 89.1 | 810.2 | 43     |  |
| equence 6, Appli  | το.         | US-10-811-136B-6 | œ  | 5041 | 89.1 | 810.2 | 42     |  |
| Sequence 6, Appli |             | US-10-790-455-6  | æ  | 5041 | 89.1 | 810.2 | 41     |  |
| Sequence 4, Appli |             | US-10-206-747-4  | ഗ  | 930  | 90.3 | 821   | 40     |  |
| Sequence 2, Appli |             | US-10-206-747-2  | Ŋ  | 930  | 90.3 | 821   | 39     |  |
| Sequence 3, Appli |             | US-09-886-942-3  | w  | 897  | 91.0 | 827.4 | 38     |  |
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| Sequence 2, Appli |             | US-09-886-942-2  | w  | 1758 | 91.5 | 831.4 | 36     |  |
| Sequence 17, Appl | _           | US-09-886-942-17 | w  | 1757 | 92.3 | 839   | ω<br>5 |  |
| Sequence 1, Appli | <del></del> | US-11-126-465-   | 10 | 3570 | 94.4 | 858.4 | 34     |  |
| Sequence 1, Appli | μ           | US-09-881-457A-  | w  | 3570 | 94.4 | 858.4 | 33     |  |
| Sequence 17, Appl | 7           | US-10-666-332-1  | 9  | 9400 | 95.1 | 864.4 | 32     |  |
| Sequence 17, Appl | 7           | US-10-467-546-1  | 7  | 9400 | 95.1 | 864.4 | 31     |  |
| Sequence 18, Appl | 80          | US-10-666-332-1  | 9  | 9362 | 95.1 | 864.4 | 30     |  |
| Sequence 18, Appl | 80          | US-10-467-546-1  | 7  | 9362 | 95.1 | 864.4 | 29     |  |
| Sequence 16, Appl | σ.          | US-10-666-332-1  | ø  | 8687 | 95.1 | 864.4 | 28     |  |
| Sequence 15, Appl | ហ           | US-10-666-332-1  | ø  | 8687 | 95.1 | 864.4 | 27     |  |
| Sequence 16, Appl |             | US-10-467-546-16 | 7  | 8687 | 95.1 | 864.4 | 26     |  |
| Sequence 15, Appl |             | US-10-467-546-15 | 7  | 8687 | 95.1 | 864.4 | 25     |  |
| Sequence 4, Appli |             | US-11-103-805-4  | 10 | 2170 | 96.2 | 874.8 | 24     |  |
|                   |             |                  |    |      |      |       |        |  |

```
RESULT 1

US-09-886-942-8
; Sequence 8, Application US/09886942
; Patent No. US20020081708A1
; GENERAL INFORMATION:
APPLICANT: PUNNONEN, JUHA
WRIGHT, ANNE
SEMYONOV, ANDREY
APPLICANT : PUNNONEN, JUHA
WRIGHT, ANNE
CURRENT APPLICATION NUMBER: US/09/886,942
; TITLE OF INVENTION NUMBER: US/09/886,942
; CURRENT APPLICATION NUMBER: 60/213,829
PRIOR APPLICATION NUMBER: 60/213,829
PRIOR FILING DATE: 2000-06-23
; NUMBER OF SEQ ID NOS: 40
; SOFTWARE: PATENTIN Ver. 2.1
; SEQ ID NO 8
; LENGTH: 1767
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Synthetic
OTHER INFORMATION: oligonucleotide
US-09-886-942-8
                                                                                                                                                                                                                                                                                                                                                              mery Match
set Local Similarity
tches 909; Conserva
                          181 ATTGGCCCATGTCCAATATGACCGCCATGTTGACATTGATTATTGACTAGTTATTAATAG 240
                                                                                                                 121 ATCAATATTGGCTATTGGCCATTGCATAACGTTGTATCCGTATCATAATATGTACATTTAT 180
    181
                                                                                       121 ATCAATATTGGCTATTGGCCATTGCATACGTTGTATCCGTATCATAATATGTACATTTAT
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                                                                                                                                                                                                         ATTIGGCCCATGTCCAATATGACCGCCATGTTGACATTGATTATTGACTAGTTATTAATAG
                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 909; DB 3; Length 1767; ilarity 100.0%; Pred. No. 1.2e-249; Conservative 0; Mismatches 0; Indels 0
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Mon Feb 6 05:44:29 2006
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| C 2 891<br>C 4 891<br>C 6 891<br>C 6 891<br>C 9 891<br>10 891<br>11 8 | Database :  Pred. score and is  Result No. Sco   | OM nucleic - nuc Run on: Title: Perfect score: Sequence: Sequence: Scoring table: Searched: Total number of Minimum DB seq 1 Maximum DB seq 1 Post-processing: |
|---|--|--|
| 891.4 98.1 13254 2 US-08-276-852-156 891.4 98.1 13254 2 US-08-899-575-150 891.4 98.1 13254 2 US-08-899-575-170 891.4 98.1 13254 6 PCT-US95-08743-176 891.4 98.1 13254 6 PCT-US95-08743-170 891.4 98.1 13254 6 PCT-US95-08743-170 891.4 98.1 299354 3 US-09-495-052-52 812 90.3 912 3 US-09-495-052-52 821 90.3 930 2 US-09-977-056A-4 821 90.3 930 2 US-08-029-022-4 821 90.3 930 2 US-08-246-376-2 821 90.3 930 3 US-09-086-841-2 821 90.3 930 3 US-09-006-841-2 821 90.3 930 3 US-09-006-841-4 821 90.3 930 3 US-09-006-841-4 821 90.3 930 3 US-09-132-391-2  | Issued Patents NA:*  1: /cgm2_6/ptodata/1/ina/1_CC 2: /cgm2_6/ptodata/1/ina/5_CC 3: /cgm2_6/ptodata/1/ina/6B_C 4: /cgm2_6/ptodata/1/ina/B_CT 5: /cgm2_6/ptodata/1/ina/PCT 6: /cgm2_6/ptodata/1/ina/PCT 7: /cgm2_6/ptodata/1/ina/PCT 8: /cgm2_6/ptodata/1/ina/BCT 9: /cgm2_6/ptodata/1/ina/BCT 1: /cgm2_6/ptodata/1/ina/BCT 9: /cgm2_6/ptodata/1/ina/BCT 9: /cgm2_6/ptodata/1/ina/BCT 9: /cgm2_6/ptodata/1/ina/BCT 9: /cgm2_6/ptodata/1/ina/BCT 9: /cgm2_6/ptodata/1/ina/BCT 9: /cgm2_6/ptodata/1/ina/BCT SUMMARIES 9: /cgm2_6/ptodata/1/ina/BCT 9: /cgm2_6/ptodata/1/ina/BCT 9: /cgm2_6/ptodata/1/ina/BCT 7  | Gencore versic Copyright (c) 1993 - 2006 leic search, using sw model February 4, 2006, 10:33:48  US-09-886-942-8_COPY_1_909 909 10                             |
| -156 Sequence 156, App -170 Sequence 170, App -170 Sequence 52, App -170 Sequence 44, App -170 Sequence 44, App -170 Sequence 44, App -170 Sequence 44, App -170 Sequence 47, App -170 -170 -170 -170 -170 -170 -170 -170 -170  | t being pri  | Biocceleration Ltd.  ; Search time 176.862 Seconds (without alignments) 9135.958 Million cell updates/secaacggtgcattggaacgcgg 909 idues idues                  |
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| 44                | 44                | 43              | 42              | 41              | 40                | 39              | 38              | 37               | 36                | 35                | 34               | 33                | 32                | 31               | 30               | 29               | 28                | 27                | 26                | 25                |
|-------------------|-------------------|-----------------|-----------------|-----------------|-------------------|-----------------|-----------------|------------------|-------------------|-------------------|------------------|-------------------|-------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| 772               | 772               | 777             | 778             | 778             | 778               | 778             | 780.6           | 786.4            | 786.4             | 786.4             | 786.4            | 786.4             | 787               | 787              | 787              | 821              | 821               | 821               | 821               | 821               |
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| 9600              | 9600              | 9756            | 5882            | 5459            | 5128              | 4276            | 4326            | 11299            | 9511              | 8560              | 7353             | 7352              | 6255              | 4210             | 4207             | 930              | 930               | 930               | 930               | 930               |
| ω                 | w                 | w               | w               | w               | w                 | ω               | w               | w                | w                 | w                 | w                | w                 | w                 | w                | w                | σ                | σ                 | w                 | w                 | ω                 |
| US-09-620-925-1   | US-08-910-647-1   | US-09-508-516-2 | US-09-721-480-6 | US-09-721-480-4 | US-09-721-480-2   | US-09-721-480-1 | US-08-760-615-7 | US-09-238-356-14 | US-09-897-511A-34 | US-09-936-572-11  | US-08-786-531B-1 | US-08-786-531B-4  | US-09-897-511A-13 | US-09-897-511A-5 | US-09-897-511A-4 | PCT-US93-05366-4 | PCT-US93-05366-2  | US-09-090-030-4   | US-09-090-030-2   | US-09-132-391-4   |
| Sequence 1, Appli | Sequence 1, Appli | 2               |                 | 4               | Sequence 2, Appli | ,-              | 7, 1            | 14               | 34                | Sequence 11, Appl | ۲,               | Sequence 4, Appli | 13,               | ,<br>v           | 4                | Α,               | Sequence 2, Appli | Sequence 4, Appli | Sequence 2, Appli | Sequence 4, Appli |

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Sequence 156, Application US/08276852
Sequence 156, Application US/08276852
Setent No. 5552138
GENERAL INFORMATION:
APPLICANT: Barbas, Carlos F
APPLICANT: Berbas, Carlos F
APPLICANT: HOMAN NEUTRALIZING MONOCLONAL ANTIBODIES
TITLE OF INVENTION: TO HUMAN IMMUNODEFICIENCY VIRUS
CORRESPONDENCE ADDRESS:
ADDRESSEE: The Scripps Research Institute, Office of
ADDRESSEE: The ADDRESS
COUNTRY: USA
CITY: La Jolla
STRATE: CA
CUNTRY: USA
CUNTRY: USA
CUNTRY: USA
CUNTRY: USA
COUNTRY: USA
COUNTRY: USA
COUNTRY: USA
COUNTRY: La Jolla
STATE: CA
COMPUTER: ADDLESS: US OS/MS-DOS
SOUTHARDER: DATE: 10-504/85-DOS
SOUTHARDER: US O8/178,302
FILING DATE: 30-SEP-1993
PEILOR APPLICATION NUMBER: US 08/178,302
FILING DATE: 30-SEP-1993
PEILOR DATE: 30-SE
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Result
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Maximum Match 100%
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Perfect score:
            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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AY402406

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AY402408

AY4024
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Biocceleration Ltd.
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DQ000968 Synthetic
AX402404 Sequence
AX402406 Sequence
X03922 Human cytom
A01324 Human cytom
A01323 Human cytom
AX268212 Sequence
AX027785 Sequence
AR038307 Sequence
AR038321 Sequence
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AY446869 Human her
AC146851 Human Her
AY315197 Human her
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AX402393 Sequence
AX402396 Sequence
AX402396 Sequence
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61 61 121 121

181 ATTGGCTCATGTCCAATATGACCGCCATGTTGACATTGATTATTGACTAGTTATTAATAG 240

ATCAATATTGGCTATTGGCCATTGCATACGTTGTATCATATCATAATATGTACATTTAT 180

 ORIGIN

Query Match 100.0%; Score 932; DB 6; 1 Best Local Similarity 100.0%; Pred. No. 3.3e-260; Matches 932; Conservative 0; Mismatches 0;

Length 1767;
indels 0;

Gaps

60

1 ATATGAGGCTATATCGCCGATAGAGGCGACATCAAGCTGGCACATGGCCAATGCATATCG

FEATURES

Maxygen,

Inc. (US)
Location/Qualifiers
1. .1767

/organism="synthetic construct" /mol\_type="unassigned.DNA" /db xref="taxon:32630" /note="Consensus sequence"

source

| RESULT 1 AX402409 LOCUS DEFINITION ACCESSION VERSION V |            |          | 44.               | <br>     | ~        | 40 8     | C (39)             | ب<br>د د | 176<br>016 |          |                    |                    |                   | 0.10     |                    | 28                |                    | 26       |          | 24       | 23       |        | 21        |        |          |  |  |
|--|------------|----------|-------------------|----------|----------|----------|--------------------|----------|------------|----------|--------------------|--------------------|-------------------|----------|--------------------|-------------------|--------------------|----------|----------|----------|----------|--------|-----------|--------|----------|--|--|
|  |            | 392.2    | 896               | 896.8    | 398.4    | 398.4    | in                 | 000      | 904.2      | 904.8    | 906.4              | 907.4              | 907.4             | 907.4    | 908                | 913               | 914.4              | 914.4    | 914.4    | 914.4    | 914.4    | 914.4  | 914.4     | 914.4  | 914.4    |  |  |
| AX402409 Sequence 21 from Patent AX402409 AX402409.1 GI:21387444 Synthetic construct synthetic construct other sequences; artific other sequences; artific Punnonen, J., Wright, A. a Novel chimeric promoters Patent: WO 020897-A 21  |            | 7        | <b>-</b> ,        |          | 42       | . 44.    |                    |          | 97.0       |          |                    |                    |                   |          |                    |                   |                    |          |          |          |          | 98.1 2 | 98.1      | 98.1   | 98.1     |  |  |
| 176 109 100 100 100 100 100 100 100 100 100  |            | 25616    | 235645            | 25770    | 229700   | 25572    | 25489              | 27701    | 7995       | 24589    | 229209             | 2361               | 2170              | 2170     | 34881              | 1766              | 33739              | 229354   | 229354   | 229354   | 29354    | œ      | տ         | 13254  | 13254    |  |  |
| Pate<br>9874<br>9874<br>9t<br>9t<br>9t<br>9t<br>9t<br>9t<br>9t<br>9t<br>9t<br>9t<br>9t<br>9t<br>9t   |            | 13       | 10                | 13       | 13       | 13       | 13 2               |          | 11         | 13       | 13                 | 13                 | o 0               | ካ ው      | 13                 | σ                 | 13                 | 13       | σ        | 6        | σ        | 13     | 13        | σ      | σ        |  |  |
| 1767 bp DNA nt WOO200897. 44 ficial sequences. and Semyonov,A. ers 21 03-JAN-2002;   | ALIGNMENTS | AY446864 | AY446894          | AY446868 | AC146904 | AY446866 | AY446867           | AVANCEC. | CVU64448   | AY446870 | AC146907           | HSSMIEP            | AX451705          | AX402408 | AC146906           | AX402394          | AC146999           | HEHCMVCG | AX686187 | AR475529 | AR474465 | 90     | AY446871  | I58610 | I58596   |  |  |
| linear PAT 07-JUN-2002   |            | Human    | AX402401 Sequence | Human    | Human    | Human    | AY446867 Human her | neuran   | loning     | Human    | AC146907 Human Her | M60321 Human cytom | AX451705 Semience |          | AC146906 Human Her | AX402394 Sequence | AC146999 Human Her |          |          |          | Segueno  | Human  | 871 Human | 0      | Sequence |  |  |

GenCore version (c) 1993 - 2006

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# SUMMARIES

| Result<br>No. | Score | Query | Query<br>Match Length | BB         | ID          | Description        |
|---------------|-------|-------|-----------------------|------------|-------------|--------------------|
| μ.            | 932   | 100.0 | 1767                  | σ          | AAL38393    | Aal38393 Consensus |
| c<br>2        | 932   | 100.0 | 218802                | 14         | ADW98820    | Adw98820 Human     |
| w             | 930.4 | 99.8  | 6408                  | Ф          | ABX10643    | Abx10643 Vector, h |
| 4             | 930.4 | 99.8  |                       | œ          | ABX10644    | Abx10644 Vector    |
| տ             | 925.6 | 99.3  | 1767                  | σ          | AAL38387    |                    |
| ტ             | 922.4 | 99.0  | 1767                  | σ          | AAL38377    |                    |
| 7             | 922.4 | 99.0  | 1767                  | σ          | AAL38386    |                    |
| 80            | 922.4 | 99.0  | 1767                  | σ          | AAL38380    | _                  |
| 9             | 922.4 | 99.0  | 3879                  | 13         | ADS20069    | 9                  |
| 10            | 922.4 | 99.0  | 4790                  | <u>,,</u>  | ADS20070    |                    |
| 11            | 920.8 | 98.8  | 1767                  | თ          | AAL38388    | വ                  |
| 12            | 920.8 | 98.8  | 1767                  | σ          | AAL38373    |                    |
| 13            | 916   | 98.3  | 1767                  | σ          | AAL38390    |                    |
| 14            | 914.4 | 98.1  | 1848                  | œ          | ADA50596    |                    |
| 15            | 914.4 | 98.1  | 1848                  | 12         | ADF53547    | J                  |
| 16            | 914.4 | 98.1  | 2133                  | <u>, .</u> | AAN91042    | Aan91042 Promoter- |
| 17            | 914.4 | 98.1  | 6845                  | o          | ABK37491    | Abk37491 Vesicular |
| 18            | 914.4 | 98.1  | 7073                  | N          | AAT50962    |                    |
| 19            | 914.4 | 98.1  | 7864                  | J          | 3 3 TE 0000 |                    |

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| 92.7                                     | 93.1     | 93.1     | 93.1     | 93.1     | 93.1     | 93.2     | 95.2               | 96.2              | 96.8     | 97.4     | 97.4     | 97.4     | 97.4     | 97.8     | 98.0              |                    | 98.1     | 98.1     | 98.1     | 98.1     | 98.1     | 98.1               | 98.1     | 98.1               |
| 8687                                     | 8149     | 8135     | 8135     | 8083     | 3570     | 1757     | 912                | 1765              | 1767     | 2361     | 2361     | 2170     | 1765     | 13254    | 1766              | 229354             | 13535    | 13254    | 13254    | 13254    | 13254    | 11795              | 9831     | 8251               |
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| ABV72727                                 | AAQ90133 | AAQ90136 | AAQ90134 | AAQ90132 | ABK90556 | AAL38389 | AAZ09519           | AAL38385          | AAL38391 | ADW07232 | ADA50595 | AAD38152 | AAL38392 | AAA31025 | AAL38378          | ABQ74179           | ADJ57067 | AAA31039 | AAA32165 | AAA32151 | AAT40915 | AAA59345           | AEB86488 | ADJ57065           |
| Aaq90135 Plasmiq p<br>Abv72727 Expressio |          | σ        | Plasmid  |          |          |          | Aaz09519 Human CMV | Aal38385 Chimeric |          | 2 DNA    |          |          |          |          | Aal38378 Chimeric | Abq74179 Human cyt |          |          |          |          |          | Aaa59345 Nucleotid | LAP ve   | Adj57065 Vector pl |

# ALIGNMENTS

RESULT 1
AALJ38393
ID AALJ38393
AC AALJ3
AC AALJ3
AC CONS
AXX Immu
KW Genee
KW wild
AXX Unid
AXX Unid 15-AUG-2002 AAL38393 standard; DNA; 1767 Consensus sequence of AD169 AAL38393; (first entry) and Towne CMV promoters. BP.

Immunomodulator; cytostatic; antibacterial; immunogenic; vaccin gene therapy; autoimmune disorder; tumour; CMV promoter; human; wild-type; vaccination;

Unidentified.

WO200200897-A2.

03-JAN-2002.

21-JUN-2001; 2001WO-US020123.

23-JUN-2000; 2000US-0213829P.

(-YXAM) MAXYGEN INC.

Punnonen J, Wright A, Semyonov A

WPI; 2002-188381/24.

New isolated or recombinant promoter/enhancers, useful in producing a prophylactic or therapeutic effect in humans, especially useful in gene therapy for treating or preventing infectious diseases, autoimmune disorders or tumors.

Disclosure; Fig 8; 110pp; English.

The invention relates to isolated or recombinant nucleic acids, which comprise any of 18 sequences fully defined in the specification. The nucleic acids are designated 1082, 1125, 1269, 1221, 1249, 3C9, 4B5, 6A8, 6B2, 6D4, 6F6, 9E1, 9F11, 9G11, 9G12, 9G4, 9G7 and 9G8, and comprise 898-1768 base pair sequences. The nucleic acids are useful in producing an

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| 868.4 93.2 1757 3 US-09-886-942-17 868 93.1 3570 10 US-11-26-465-1 864.4 92.7 8687 7 US-10-467-546-15 864.4 92.7 8687 7 US-10-666-332-15 864.4 92.7 8687 9 US-10-666-332-15 864.4 92.7 8687 9 US-10-663-32-16 864.4 92.7 9362 7 US-10-663-32-18 864.4 92.7 9362 7 US-10-663-32-18 864.4 92.7 9362 9 US-10-663-32-17 864.4 92.7 9362 9 US-10-663-32-17 864.4 92.7 9400 9 US-10-666-332-17 859.2 20 1757 3 US-09-886-942-2 857.2 92.0 1757 3 US-09-886-942-3 815 87.4 5041 8 US-10-90-55-6 815 87.4 5041 8 US-10-90-35-6 815 87.4 5041 9 US-10-90-35-6 815 87.4 5041 10 US-11-068-155-6 |
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| 1757 3 3570 10 8687 7 8687 7 9 9362 9 9400 9 9400 9 1758 3 1757 3 1757 3 5041 8 5041 8 5041 9   |
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| 3 US-09-886-942-17<br>3 US-09-881-457A-1<br>10 US-11-126-465-1<br>1 US-11-26-46-15<br>7 US-10-666-332-16<br>9 US-10-666-332-16<br>9 US-10-666-332-18<br>9 US-10-666-332-17<br>9 US-10-666-332-17<br>10S-10-666-332-17<br>10S-10-666-332-17<br>10S-10-666-332-17<br>10S-10-666-332-17<br>10S-10-666-332-17<br>10S-09-886-942-2<br>3 US-09-886-942-2<br>3 US-09-886-942-3<br>10S-10-206-747-4<br>2 US-10-206-747-4<br>3 US-10-206-747-4<br>3 US-10-886-942-3<br>8 US-10-90-455-6<br>9 US-10-950-050-6<br>9 US-10-950-050-6  |
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|   |

### RESULT 1 US-09-886-942-21 US-09-886-942-21 ; Sequence 21, Application US/09886942 ; Patent No. US20020081708A1 ; GENERAL INFORMATION: ; GENERAL INFORMATION: SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 21 LENGTH: 1767 PRIOR APPLICATION NUMBER: 60/213,829 PRIOR FILING DATE: 2000-06-23 NUMBER OF SEQ ID NOS: 40 TITLE OF INVENTION: NOVEL CHIMERIC PROMOTERS FILE REFERENCE: 02-031910US CURRENT APPLICATION NUMBER: US/09/886,942 CURRENT FILING DATE: 2001-06-21 ORGANISM: Artificial Sequence FEATURE: FEATURE: OTHER INFORMATION: Description OTHER INFORMATION: sequence WRIGHT, ANNE SEMYONOV, ANDREY PUNNONEN, JUHA Description of Artificial Sequence: Consensus

Copyright

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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Maximum DB
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(c) 1993 - 2006 Biocceleration Ltd
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Pred. No. is the number of results predicted by chance to have score greater than or equal to the score of the result being part and is derived by analysis of the total score distribution. Pred. No. ve a printed,

Result

| eault<br>No. | Score | Query | Query<br>Match Length | BB | ID                | Description       |
|--------------|-------|-------|-----------------------|----|-------------------|-------------------|
| ٠.           | 914.4 | 98.1  | 1848                  | 6  | US-10-978-927-32  | Sequence 32, App  |
| N            | 914.4 | 98.1  | 8251                  | 7  | -10-521-768       | N                 |
| w            | 914.4 | 98.1  | 13535                 | 7  | •                 | 4                 |
| 4            | 815   | 87.4  | 5041                  | œ  | -11-193-750-      | σ.                |
| տ            | 815   | 87.4  | 5043                  | 8  | -11-              | <b>ن</b> ر        |
| 6            | 815   | 87.4  | 5101                  | 60 | -11-193-750-      | 4                 |
| 7            | 815   | 87.4  | . 5924                | œ  | US-11-193-750-3   | ω                 |
| 8            | 815   | 87.4  | 5982                  | œ  | US-11-193-750-2   | ν,                |
| 9            | 815   | 87.4  | 6233                  | œ  | -11-              | 5                 |
| 10           | 815   | 87.4  | 17402                 | œ  | -11-              |                   |
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| 12           | 795.6 | 85.4  | 10369                 | 7  | US-10-521-768-3   | w<br>-            |
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| 14           | 793.6 | •     | 3547                  | œ  | US-11-115-425-100 | 10                |
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| 16           | 792.4 | 85.0  | 5089                  | æ  | US-11-179-798-5   | ຫ                 |
| 17           | 792.4 |       | 5488                  | æ  | US-11-179-798-3   | w<br>-            |
| 18           | 792.4 | •     | 5488                  | œ  | US-11-179-798-6   | σ,                |
| 19           | 792.4 | 85.0  | 5500                  | 8  | US-11-179-798-1   | Sequence 1, Appli |
| 20           | 792.4 | •     | 5500                  | œ  | US-11-179-798-4   | 4                 |
| 21           | 792   | 85.0  |                       | 8  | US-11-115-425-12  | 12,               |
| 22           | 792   | ,     | 4432                  | •  |                   |                   |

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| 24 792 85.0 7073 8 US-11-038-933-2 25 792 85.0 7272 8 US-11-038-933-3 26 792 85.0 7285 8 US-11-138-933-3 27 791.6 84.9 2196 8 US-11-115-425-13 28 782.6 84.0 5302 7 US-10-401-3868-62 773.4 81.3 4775 7 US-10-401-3868-62 30 739.6 79.4 9117 8 US-11-065-716-51 31 738.8 79.3 6630 8 US-11-065-716-51 32 734.2 78.8 12745 6 US-10-978-927-8 33 719.2 77.2 1022 8 US-11-118-855-2 34 719.2 77.2 1022 8 US-11-118-855-2 37 711.4 76.3 5391 8 US-11-106-820-21 38 711.4 76.3 5391 8 US-11-159-919-15 39 711.4 76.3 6135 8 US-11-196-046-45 40 711.4 76.3 6135 8 US-11-196-046-45 41 711.4 76.3 6135 8 US-11-196-046-45 42 711.4 76.3 6135 8 US-11-196-046-45 43 711.4 76.3 6135 8 US-11-196-046-45 44 711.4 76.3 6135 8 US-11-196-046-45 45 711.4 76.3 7201 8 US-11-199-19-16 46 711.4 76.3 7201 8 US-11-199-19-16 |                  |          |          |          |          |          |                   |          |          |          |                   |          |          |          |       |          |       |                   |          |          |            |          |
|---|------------------|----------|----------|----------|----------|----------|-------------------|----------|----------|----------|-------------------|----------|----------|----------|-------|----------|-------|-------------------|----------|----------|------------|----------|
| 85.0 7073 8 US- 85.0 7272 8 US- 85.0 7285 8 US- 84.9 2196 7 US- 84.9 5302 7 US- 81.3 4775 7 US- 79.4 9117 8 US- 79.3 6137 6 US- 77.2 14807 7 US- 77.2 14807 6 US- 77.3 5391 6 US- 76.3 5391 8 US- 76.3 6135 6 US- 76.3 6135 8 US- 76.3 7201 8 US- 76.3 7201 8 US- 76.3 7201 8 US-   | 45               | 44       | 43       | 42       | 41       | 40       | 39                | 38       | 37       | 36       | 35                | 34       | 33       | 32       | 31    | 30       | 29    | 28                | 27       | 26       | 25         | 24       |
| .0 7273 8 US0 7273 8 US0 7285 8 US0 5302 7 US3 4775 7 US3 4775 7 US3 12745 6 US2 1402 8 US3 5391 6 US3 5391 8 US3 5391 8 US3 5391 8 US3 6135 8 US3 6135 8 US3 6731 6 US3 7201 8 US-   | 711.4            | 711.4    | 711.4    | 711.4    | 711.4    | 711.4    | 711.4             | 711.4    | 711.4    | 711.4    | 711.4             | 719.2    | 719.2    | 734.2    | 738.8 | 739.6    | 757.4 | 782.6             | 791.6    | 792      | 792        | 792      |
| 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8   | 76.3             | 76.3     | 76.3     | 76.3     | 76.3     | 76.3     | 76.3              | 76.3     | 76.3     | 76.3     | 76.3              | 77.2     | 77.2     | 78.8     | 79.3  | 79.4     | 81.3  | 84.0              | 84.9     | 85.0     | 85.0       | 85.0     |
| 8 US-11-038-933-2 8 US-11-038-933-3 8 US-11-038-933-3 8 US-11-038-933-3 7 US-10-401-3868-62 8 US-11-003-967-26 8 US-11-065-716-8 8 US-11-118-855-2 7 US-10-985-490C-49 6 US-11-118-855-2 7 US-11-118-855-2 8 US-11-118-919-17 6 US-11-159-919-17 6 US-11-166-820-21 8 US-11-166-820-22 6 US-11-166-820-22 6 US-11-166-820-22 6 US-11-199-199-16 8 US-11-199-199-16  | 7496             | 7201     | 7127     | 6741     | 6135     | 6135     | 6135              | 5988     | 5391     | 5391     | 5391              | 4800     | 1022     | 12745    | 6630  | 9117     | 4775  | 5302              | 2196     | 7285     | 7272       | 7073     |
| US-11-038-933-2 US-11-038-933-3 US-11-038-933-3 US-11-115-425-13 US-11-401-386B-62 US-11-036-97-26 US-11-055-716-51 US-11-055-716-51 US-10-978-927-8 US-11-118-855-2 US-11-118-855-2 US-11-118-855-2 US-11-108-820-21 US-11-108-820-21 US-11-106-820-22 US-11-106-820-22 US-11-106-820-22 US-11-108-3646-21 US-11-108-31-46   | œ                | ω        | æ        | σ        | œ        | 8        | σ                 | œ        | œ        | œ        | σ                 | 7        | æ        | σ        | Ф     | œ        | 7     | 7                 | æ        | œ        | œ          | œ        |
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Sequence 32, Application US/10978927

Publication No. US2006009406A1

GENERAL INFORMATION:

APPLICANT: Kyrkanides, Stephanos

TITLE OF INVENTION: VECTORS HAVING BOTH ISOFORMS OF

TITLE OF INVENTION: BETA-HEXOSAMINIDASE

FILE REFERENCE: 21108.0018U2

CURRENT PILING DATE: 2004-11-01

PRIOR APPLICATION NUMBER: PCT/US03/13672

PRIOR APPLICATION NUMBER: 60/377,503

PRIOR FILING DATE: 2003-05-02

PRIOR FILING DATE: 2003-05-02
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US-10-978-927-32
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LENGTH: 1848

TYPE: DNA

ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:/Note
OTHER INFORMATION: Synthetic Construct
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Best Local Similarity 98.8
Matches 921; Conservative
513
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                                       ATTGGCTCATGTCCAATATGACCGCCATGTTGACATTGATTATTGACTAGTTATTAATAG 240
                                                                                                             ATCAATATTGGCTATTGGCCATTGCATACGTTGTATCCATATCATAATATGTACATTAT 512
ATTGGCTCATGTCCAACATTACCGCCATGTTGACATTGATTATTGACTAGTTATTAATAG
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98.8%;
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Pred. No. 8.4e-268;
0; Mismatches 11;
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PCT-US95-08743-156
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US-09-006-841-2
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9135.958 Million cell updates/sec
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Sequence 170, App
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Sequence 156, App
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Sequence 170, App
Sequence 170, App
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|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|-----------------|-----------------|-----------------|
| 801             | 801             | 108             | 108             | 108             | 108             | 801             | 801             | 801             | 801.4           | 801.4           | 807.4           | 807.4           | 807.4           | 807.4           | 810             | 842.4            | 842.4            | 842.4           | 842.4           | 842.4           |
| 85.9            | 85.9            | 85.9            |                 | 85.9            | 85.9            | 85.9            | •               | 85.9            | 86.0            |                 | 86.6            |                 | 86.6            | 86.6            |                 | 90.4             | 90.4             | 90.4            | 90.4            | 90.4            |
| 5107            | 5107            | 4818            | 4818            | 4328            | 4328            | 4328            | 4328            | 4328            | 9600            | 9600            | 5882            | 5459            | 5128            | 4276            | 4326            | 930              | 930              | 930             | 930             | 930             |
| W               | ω               | W               | w               | w               | ω               | w               | ω               | w               | ω               | Ų               | ω               | w               | w               | ω               | w               | σ                | σ                | w               | w               | w               |
| US-09-620-925-3 | US-08-910-647-3 | US-09-620-925-4 | US-08-910-647-4 | US-09-620-259-1 | US-09-620-260-1 | US-09-620-925-2 | US-08-910-647-2 | US-09-132-808-1 | US-09-620-925-1 | US-08-910-647-1 | US-09-721-480-6 | US-09-721-480-4 | US-09-721-480-2 | US-09-721-480-1 | US-08-760-615-7 | PCT-US93-05366-4 | PCT-US93-05366-2 | US-09-090-030-4 | US-09-090-030-2 | US-09-132-391-4 |
| Sequence 3      | Sequence 3      | Sequence 4      | Sequence 4      | Sequence 1      |                 | Sequence 2      |                 | Sequence 1      |                 | Sequence 1      |                 |                 | Sequence 2      | Sequence 1      |                 | Sequence 4       |                  | Sequence 4      | Sequence 2      | Sequence 4      |
| •               | -               | •               | -4.             | -               | •               | •               | •               | •               | •               | •               | •               | -               | •               | ,_              | •               | •                | •                | •               | •               | •               |
| Appli            | Appli            | Appli           | Appli           | Appli           |

# US-08-276-852-156 ISEQUENCE 156, Application US/08276852 Patent No. 5652138 GENERAL INFORMATION: APPLICANT: Burton, Dennis R APPLICANT: Lerner, Richard A TITLE OF INVENTION: HUMAN INMUNODEFICIENCY VIRUS FORESSONUBRICA ADDRESS: CORRESSONUBRICA ADDRESS: ADDRESSE: The SCripps Research Institute, Office of ADDRESSES: The SCripps Research Institute, Office of ADDRESSES: Patent Counsel STREET: 10666 No. 5652138th Torrey Pines Road, Suite 220, STREET: USA CITY: La Jolla STATE: CA CONTRY: USA COMPUTER READABLE FORM: MEDIUM TYPE: Ploppy disk COMPUTER READABLE FORM: MEDIUM TYPE: US/08/276,852 FILING DATE: 30-SEP-1993 FILING DATE: 30-SEP-1993 PRIOR APPLICATION NUMBER: US/08/276,852 FILING DATE: 30-SEP-1993 PRIOR APPLICATION NUMBER: US 07/954,148 PRIOR APPLICATION NUMBER: US 08/178,302 PRINTER FILLING DATE: 30-SEP-1993 PRINTER FILLING DATE: 30-SEP-1993 PRINTER PRIOR NUMBER: US 07/954,148 PRIOR APPLICATION NUMBER: US 08/178,302 PRINTER PRIOR NUMBER: US 08/178,302 PRI